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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,191	12/23/2003	Hironori Motoe	008312-0307437	7514
909	7590	08/21/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			VIGUSHIN, JOHN B	
P.O. BOX 10500			ART UNIT	PAPER NUMBER
MCLEAN, VA 22102			2841	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/743,191	MOTOE, HIRONORI
	Examiner	Art Unit
	John B. Vigushin	2841

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 Apr 2006 & 9 May 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1,4,9 and 11 is/are allowed.
- 6) Claim(s) 3,7 and 8 is/are rejected.
- 7) Claim(s) 2 and 10 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 20060410, 20060509.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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10/743,191

EXAMINER

ART UNIT

PAPER

20060808

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Enclosed herewith is a letter indicating Examiner's withdrawal from issue, in accordance with 37 CFR § 1.313, due to Applicant's filing of IDS documents on 4/10/2006 and 5/9/2006. An action based on the above-cited documents is either enclosed herewith or will follow shortly.

John B. Vigushin  
Primary Examiner  
Art Unit: 2841

## DETAILED ACTION

### *Information Disclosure Statement*

1. The Examiner acknowledges Applicant's IDS filings of April 10, 2006 and May 09, 2006, prior to the payment of the issue fee, consisting of the Office Actions of the Japanese Patent Office and the Patent Office of the People's Republic of China, respectively.

### *Withdrawal from Issue under 37 CFR § 1.313*

2. The indicated allowability of dependent Claim 3 and base Claim 7 is withdrawn in view of the above-cited Office Actions and the Examiner's reconsideration of the entire instant Application in view of some of those observations made in both of the above-cited Office Actions. The present Office Action is either included with or follows a *Letter of Withdrawal From Issue under 37 CFR § 1.313*.

### *Claim Objections*

3. Claims 2, 7 and 10 are objected to because of the following informalities:
  - In Claim 2, line 2: "parallelpiped" should be changed to --parallelepiped--.
  - In Claim 7, line 8: "parallelpiped" should be changed to --parallelepiped--.
  - In Claim 10, line 3: "parallelpiped" should be changed to --parallelepiped--.Appropriate correction is required.

***Specification***

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

(a) Claim 7, lines 8-9, recite "wherein the first module and the second module are rectangularly parallelpiped [sic] shaped." This limitation lacks proper antecedent basis in the Specification. **Therefore, the Specification should be amended to add the above-cited claim language (with the proper spelling of 'parallelepiped'), thereby providing the required antecedent basis for this limitation of Claim 7 in the Specification.**

(b) Claim 10, lines 2-3, recite "wherein the first module and the second module are rectangularly parallelpiped [sic] shaped." This limitation lacks proper antecedent basis in the Specification. **Therefore, the Specification should be amended to add the above-cited claim language (with the proper spelling of 'parallelepiped'), thereby providing the required antecedent basis for this limitation of Claim 10 in the Specification.**

(c) Claim 2, lines 1-2, recite, "wherein the first module and the second module are shaped like rectangular parallelpiped [sic]." This limitation lacks proper antecedent basis in the Specification. **Therefore, the Specification should be amended to add the above-cited subject matter (with the proper spelling of 'parallelepiped'), AND expressing it using the same and more definite claim language employed in Claims 7 and 10.** Accordingly, in Claim 2, line 2, "shaped like rectangular parallelpiped"

should be replaced by –rectangularly parallelepiped shaped–, thus conforming to the definite claim language of Claims 7 and 10 (see the two paragraphs, above), and then the Specification should be also amended to add the above-cited claim language, thereby providing the required antecedent basis for this limitation of Claim 2 (and Claims 7 and 10, as well) in the Specification.

5. The disclosure is objected to because of the following informalities:

A) The problems with the juxtaposition “tuner/MPEG module:”

(i) On p.12, lines 22-23: “tuner/MPEG module 21” is an unexplained and vague juxtaposition and may be contributing to the Applicant’s problematic claimed subject matter in Claims 3 and 7, discussed by the Examiner in the rejections below, wherein the Applicant may be contemplating the MPEG module 21 (which includes a decoder 212) instead of the tuner 211 (the correct module for the claimed structure, said tuner 211 not including a decoder but outputting a signal to the decoder 212, as in Fig. 2). What does it mean? The clause in line 22—“and MPEG2 decoder of the tuner/MPEG module 21”—does not require the juxtaposition because it is sufficient to indicate the ‘MPEG2 decoder of the MPEG module 21.’ The tuner 211 is among the elements—encoder 215 and decoder 218—that are mounted on or wired within the MPEG module 21 (see Specification p.12, lines 21-23). Accordingly, for the sake of clarity and language truly supportive of the claimed subject matter, “tuner/MPEG module 21,” in lines 22-23, should be replaced by –MPEG module 21–.

(ii) On p.15, line 25 of the Specification (see also Applicant’s amendment to Specification on p.2 of Amendment filed March 07, 2006), similarly as in paragraph (i)

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above, "tuner/MPEG module 21 should be changed to --MPEG module 21-- because the meaning of "TV broadcast program data compression-encoded by the tuner/MPEG module 21" is not clear due to the unexplained and vague juxtaposition "tuner/MPEG module 21." What does the tuner have to do with the data compression encoding? The data compression encoding occurs in the MPEG2 encoder 215 that is on MPEG module 21 (see Specification, p.10, lines 15-17), the tuner 211 not having any encoding function at all. Accordingly, for the sake of clarity and language truly supportive of the claimed subject matter, "tuner/MPEG module 21;" on p.15, line 25, should be replaced by --MPEG module 21--.

(iii) On p.18, lines 5-8, the MPEG modules 21 are not "commonly arranged adjacent to and parallel with each other in the same direction so that connectors 211A lie opposite the corresponding TV antenna connectors 301." Rather it is the two tuner 211 that are so arranged. Therefore:

(a) On p.18, lines 3-4, "the MPEG module 21" should be replaced by -- each tuner 211--.

(b) On p.18, lines 5-6, "two tuners/MPEG modules 21" should be replaced by --two tuners 211--.

(iv) On p.20, line 10 of the Specification (see also Applicant's amendment to Specification on p.3 of Amendment filed March 07, 2006), the problem with the juxtaposition "tuners/MPEG modules 21" is even more apparent in the phrase "arranging the tuners/MPEG modules 21 so that the connectors 211A lie adjacent to and parallel with each other so as to extend in the opposite directions" implies the

MPEG modules 21 can be so arranged. But that is not possible. It is the tuners 211 that are so arranged on an MPEG module 21 so that the connectors 211A lie adjacent to and parallel with each other so as to extend in the opposite directions. Accordingly, for the sake of clarity and language truly supportive of the claimed subject matter, “arranging the tuners/MPEG modules 21,” on p.20, line 10, should be replaced by — arranging the two tuners 211 on each of the MPEG modules 21—.

(v) On p.20, lines 13-14 of the Specification, “tuners/MPEG modules 21” should be replaced by —TV tuners 211—, since it is the tuners 211 that are “misaligned with each other in the direction in which the connectors 211A extend” (lines 13-15);” not the MPEG modules 21.

B) On p.17, line 3 of the Specification, “the two MPEG modules 21” should be replaced by —the two TV tuners 211—.

C) On p.17, line 13 of the Specification, “the two MPEG modules 21” should be replaced by —the two TV tuners 211—.

*Examiner’s Note:* As justification for the changes indicated in B) and C), above, compare p.17, lines 11-17 with p.17, line 24-p.18, line 2. Also, see discussion in section A), parts (i)-(v), above.

D) Minor informalities in the Specification:

On p.10, line 12, “303” should be changed to —304—.

On p.10, line 20, “turner” should be changed to --tuner--.

On p.14, line 24, “41” should be changed to —411—.

On p.14, line 25, “41” should be changed to —411—.

On p.15, line 2, "41" should be changed to --411--.

On p.16, line 24, "module" should be changed to --modules--.

On p.21, line 6, "exampled" should be changed to --examples--.

Appropriate correction is required.

E) The Abstract (p.26 of the Specification):

In lines 3-4, the Applicant asserts "the present invention includes two modules which decode high frequency signals" (bold/underlined emphasis added). Then lines 4-16 proceed to describe the radio communication modules—i.e., tuners 211—, each with an RF section located in the modules as disclosed in Figs. 4 and 5A,B in the Specification. However, **these two modules do not decode** the high frequency signals; rather, the two modules—(i.e., the above-mentioned radio communication modules (tuners 211)—receive the video signals from the splitter, select channels, and transmit the selected high frequency (video) signals to an NTSC decoder (see Specification, p.9, lines 12-24). Thus, it is not the two modules, each with an RF section, that decode high frequency signals; instead, the two modules function to receive, select and transmit the signals and send the signals to another device (NTSC decoder) that performs the decoding operation. Accordingly, in the Abstract, line 3, "decode" should be replaced by —receive, select and transmit—, in order to accurately describe the invention contemplated in the disclosure. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 3, 7 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

A) Regarding Claim 3:

(i) Claim 3 recites the limitation "wherein the first module and the second module each have a decoding portion which decodes an analog signal and which is provided at a position away from a center of the module in either longitudinal direction." However, there is no such structure taught in the disclosure that supports the claimed requirement that the first and second modules "each have a decoding portion which decodes an analog signal and which is provided at a position away from a center of the module in either longitudinal direction." What the disclosure (Applicant's Specification and Drawings) does support is that "two tuners 211, i.e., the radio communication modules" (see p.17, lines 24-25 and p.20, lines 26-27, wherein the tuners 211 are taught as "radio communication modules") each have an RF module 211B (NOT a decoder), wherein the "RF module 211B of each tuner 211 is provided between the center of the tuner 211 and the corresponding connector 211A as shown in Figs. 5A and 5B" (p.19, lines 21-24). The function of the tuner 211 is disclosed as follows: "The TV tuner 211 receives TV broadcast signals and selects a channel on the

basis of the viewing request. A video signal for TV broadcast program data transmitted on a certain channel is received by the TV tuner and then transmitted to the NTSC decoder 212" (p.9, lines 20-24).

(ii) Thus, the TV tuner 211 (i.e., the "radio communication module") transmits a video signal to a decoder that is not a portion of the TV tuner 211, itself. Hence, the TV tuner 211 does not "have a decoding portion which decodes an analog signal." Furthermore, the "first module" and "second module" recited in Claim 3 (and base Claim 1) can be none other than the first radio communication module (i.e., first tuner 211) and the second radio communication module (i.e., second tuner 211), as disclosed in the supporting disclosure (p.17, lines 24-25 and p.20, lines 26-27), each of the first and second modules (tuners 211) having an RF module (p.19, lines 21-24). The RF module is not a decoding portion which decodes, or is configured to decode, an analog signal.

(iii) Accordingly, what Applicant's disclosure does support is the following adaptation of Claim 3 by the Examiner (annotated in italics within braces): The electronic apparatus according to claim 1, wherein the first module {*first tuner 211, which the disclosure teaches as a radio communications module*} and the second module {*second tuner 211, which the disclosure teaches as a radio communications module*} each have {*an RF module 211B*} which is provided at a position away from a center of the module in either longitudinal direction." This reading of Claim 3 is clearly what is contemplated and supported in the disclosure in Fig. 4 and p.18, lines 9-15 and in Figs. 5A, 5B and p.19, lines 21-24.

**B) Regarding Claim 7:**

Claim 7 recites the limitation "the first module and the second module each have a decoding portion configured to decode an analog signal and which is provided at a position away from a center of the module in either longitudinal direction." The same arguments provided in the rejection of Claim 3, above, apply as well to the similarly claimed limitation, above-cited, in Claim 7. That is, there is no "decoding portion configured to decode an analog signal and which is provided at a position away from a center of the module in either longitudinal direction." There is, however, an RF module in each of the first and second modules (i.e., first and second tuners), the RF module provided at a position away from a center of the module (tuner) in either longitudinal direction (Fig. 4 and p.18, lines 9-15 and in Figs. 5A, 5B and p.19, lines 21-24).

**C) Claim 8 depends from Claim 7 and therefore inherits the above-discussed defect of the claim.**

***Allowable Subject Matter***

8. Claims 1, 4, 9 and 11 have been allowed.
9. Claims 2 and 10 would be allowable if: (i) the Specification is amended to overcome the disclosure (Specification) objections under 37 U.S.C. § 1.75(d)(1) and MPEP § 608.01(o), and (ii) the claims are amended to correct the spelling error objections, set forth in this Office action.

10. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

11. The following is a statement of reasons for the indication of allowable subject matter:

As to base Claim 1, patentability resides in the second connecting portion located in an opposite direction to the first connecting portion, in combination with the other limitations of the claim. [Examiner's Note]: The support in the disclosure for the claimed invention of Claim 1 is the first radio communication module, i.e., tuner 211 (NOT the MPEG module 21) with first connector 211A connected to splitter 306, the second radio communication module, i.e., tuner 211 (NOT the MPEG module 21) with second connector 211A connected to splitter 306. See Figs. 4, 5A and 5B; p.17, line 21-p.19, line7: as indicated in the objections to the Specification set forth in the present Office Action, the tuners 211—and not the MPEG modules 21—are the modules with the connecting portions 211A located in opposite directions to each other].

As to base Claim 9, patentability resides in the second connecting portion located in an opposite direction to the first connecting portion, in combination with the other limitations of the claim. [Examiner's Note]: The support in the disclosure for the claimed invention of Claim 9 is the first radio communication module, i.e., tuner 211 (NOT the MPEG module 21) with first connector 211A connected to splitter 306, the second radio communication module, i.e., tuner 211 (NOT the MPEG module 21) with second connector 211A connected to splitter 306. See Figs. 4, 5A and 5B; p.17, line 21-p.19,

line7: as indicated in the objections to the Specification set forth in the present Office Action, the tuners 211—and not the MPEG modules 21—are the modules with the connecting portions 211A located in opposite directions to each other].

### ***Examiner's Remarks***

12. The IDS filings of April 10, 2006 and May 09, 2006 consist of the Office Actions of the Japanese Patent Office (JPO) and the Patent Office of the People's Republic of China (CPO), respectively, each of which correctly observed that the claimed subject matter, wherein “the first module and the second module each have a decoding portion which decodes an analog signal and which is provided at a position away from a center of the module in either longitudinal direction,” is not supported in the Applicant’s disclosure (see p.3 of English translation of CPO Action and p.2/4 of English translation of JPO Action), similar to the requirement of 35 USC § 112, 1<sup>st</sup> paragraph.

Accordingly, the objections and rejections set forth in the present Office Action are based on the Examiner’s better understanding of the instant Application due to the above-cited foreign patent office observations and the Examiner’s careful re-reading of the disclosure, all of which has provided compelling evidence motivating a reconsideration by the Examiner of the Applicant’s entire disclosure and the unsupported subject matter of Claims 3 and 7.

The Examiner does not consider the prior art relied upon (JPO and CPO) and the rationale based on common knowledge in the art in combination with the prior art (CPO) as sufficient to meet the requirements of 35 USC § 102 and 35 USC § 103(a).

The JPO reference relied upon (JP2004-087708 A) has a publication date of March 18, 2004 and therefore does not qualify as prior art under 35 USC § 102, and furthermore does not disclose the required limitations of base Claims 1 and 9 of the instant Application.

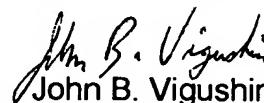
The CPO reference relied upon, Ben-Efraim et al. (US 5,955,783), is interpreted by the CPO in a manner that does not read on the recited limitations of Claims 1 and 9 of the instant Application. Fig. 6 is a tuner chip 402 with pinouts arranged such that input pins (e.g. 644, 617) are maximally spaced from pins for other HF I/O signals (e.g., tank circuit pins 640, 641) to prevent electromagnetic interference on the input lines corresponding to the input pins (col.11: 27-53). Ben-Efraim et al. does not teach a first module mounted on the circuit board with first connecting portion connected to the splitter, a second module mounted on the circuit board with second connecting portion connected to the splitter, wherein the second connecting portion is located in an opposite direction to the first connecting portion, as required by base Claims 1 and 9 of the instant Application. The tuner chip 402 of Fig. 6 neither itself comprises two modules nor can the tuner chip be assumed to be connected to two modules with connector portions located in opposite direction to each other without some extrinsic evidence providing a teaching or strong suggestion to that effect. The CPO rejection of Claim 1 evidently only speculates about such modules being connected to the tuner chip 402 in the required manner based only on an assertion of common knowledge in the art (CPO English language translation, the paragraph bridging pp.1-2).

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Vigushin whose telephone number is 571-272-1936. The examiner can normally be reached on 8:30AM-5:00PM Mo-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John B. Vigushin  
Primary Examiner  
Art Unit 2841

jbv  
August 10, 2006